a system for biasing and reading the capacitance of the pressure sensing pixel capacitors, and comprising

column electrode selection circuits,

row electrode selection circuits, and

a logic circuit connected to the column and row electrode selection circuits for sequentially scanning the pressure sensing pixel capacitors and outputting pixel values of the pressure for constructing a distribution map of the pressure over an area of the array.

17. The device of Claim 16, wherein the column electrodes and row electrodes each comprise a fabric including weft oriented threads of dielectric material and warp oriented threads alternately of a conducting material and of a dielectric material, the fabrics being fastened onto opposite faces of the elastically compressible dielectric.

18. The device of Claim 16, wherein the column electrodes and row electrodes each comprise parallel stripes of conductive paint applied onto a respective face of the elastically compressible dielectric.

19. The device of Claim 16, wherein the column electrodes and row electrodes each comprise a plurality of stripes of adhesive tape incorporating a thread of conductive material, the stripes of adhesive tape being laid over each other with the elastically compressible dielectric interposed

at each crossing.

20. The device of Claim 19, wherein the elastically compressible dielectric has a metal coating on both faces contacted by the thread of conductive material of the respective adhesive tape of one of the column and row electrodes.

21. The device according to Claim 19, wherein the elastically compressible dielectric comprises a gas filled cushion, the opposite faces of which elastically swell and shrink depending on the pressure difference between the filling gas of the cushion and ambient air.

22. The device according to Claim 19, wherein the flexible object comprises a sail, and wherein the array of pressure sensing pixel capacitors is fixed on both faces thereof.

23. A bidimensional pressure sensor for producing a distribution map of pressure over a surface of a flexible object, the sensor comprising an array of pressure sensing pixel capacitors comprising column electrodes and row electrodes orthogonal to each other and spaced, at least at each crossing between a column electrode and a row electrode, by an elastically compressible dielectric, and readable by sequentially scanning the pixel capacitors.

24. The sensor of Claim 23, wherein the column electrodes and row electrodes each comprise a fabric including weft oriented threads of dielectric material and warp oriented threads alternately of a conducting material and of a dielectric material, the fabrics being fastened onto opposite faces of the elastically compressible dielectric.

25. The sensor of Claim 23, wherein the column electrodes and row electrodes each comprise parallel stripes of conductive paint applied onto a respective face of the elastically compressible dielectric.

26. The sensor of Claim 23, wherein the column electrodes and row electrodes each comprise a plurality of stripes of adhesive tape incorporating a thread of conductive material, the stripes of adhesive tape being laid over each other with the elastically compressible dielectric interposed at each crossing.

27. The sensor of Claim 26, wherein the elastically compressible dielectric has a metal coating on both faces contacted by the thread of conductive material of the respective adhesive tape of one of the column and row electrodes.

28. The sensor according to Claim 26, wherein the elastically compressible dielectric comprises a gas filled cushion, the opposite faces of which elastically swell and

shrink depending on the pressure difference between the filling gas of the cushion and ambient air.

29. A method of detecting pressure over a surface of a flexible object, the method comprising:

providing an array of pressure sensing pixel capacitors on the object and comprising column electrodes and row electrodes orthogonal to each other and spaced, at least at each crossing between a column electrode and a row electrode, by an elastically compressible dielectric; and

scanning the pressure sensing pixel capacitors to detect the pressure over the surface of the flexible object.

30. The method of Claim 29, wherein the column electrodes and row electrodes each comprise a fabric including weft oriented threads of dielectric material and warp oriented threads alternately of a conducting material and of a dielectric material, the fabrics being fastened onto opposite faces of the elastically compressible dielectric.

31. The method of Claim 29, wherein the column electrodes and row electrodes each comprise parallel stripes of conductive paint applied onto a respective face of the elastically compressible dielectric.

32. The method of Claim 29, wherein the column electrodes and row electrodes each comprise a plurality of stripes of adhesive tape incorporating a thread of conductive

material, the stripes of adhesive tape being laid over each other with the elastically compressible dielectric interposed at each crossing.

33. The method of Claim 32, wherein the elastically compressible dielectric has a metal coating on both faces contacted by the thread of conductive material of the respective adhesive tape of one of the column and row electrodes.

34. The method according to Claim 32, wherein the elastically compressible dielectric comprises a gas filled cushion, the opposite faces of which elastically swell and shrink depending on the pressure difference between the filling gas of the cushion and ambient air.

35. A method of trimming a sail to maximize net pressure acting on the windward face of the sail, the method comprising:

providing an array of pressure sensing pixel capacitors on the sail and comprising column electrodes and row electrodes orthogonal to each other and spaced, at least at each crossing between a column electrode and a row electrode, by an elastically compressible dielectric;

scanning the pressure sensing pixel capacitors to detect the pressure over the surface of the sail; and

producing real time distribution maps of the